

# Daniel Molitor

<https://dmolitor.com> [github.com/dmolitor](https://github.com/dmolitor) [molitdj97@gmail.com](mailto:molitdj97@gmail.com)

## Education

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<b>Cornell University</b> <i>PhD in Information Science</i>	2022 – 2027 (Expected)
<b>Bethel University</b> <i>B.A. in Mathematics and Economics</i>	2016 – 2019

## Relevant Experience

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<b>Research Improving People's Lives</b> <i>Pre-Doctoral Fellow</i>	2019 – 2022
<ul style="list-style-type: none"><li>• Combined causal inference and machine learning methods to derive occupational ROI metrics and deliver personalized career recommendations. These recommendations drive RIPL's DOORS recommendation algorithm which has been accessed by thousands of job seekers in RI.</li><li>• Integrated RIPL's DOORS recommendation system seamlessly with state-specific data warehouses spanning multiple states.</li><li>• Efficiently scaled the DOORS predictive modeling pipeline on AWS, accommodating data sources containing hundreds of millions of rows.</li><li>• Produced insightful causal ROI metrics for all state-sponsored labor training programs in RI.</li><li>• Developed and maintained R and Python codebases for various internal purposes, including RIPL's occupational ROI metrics and the primary build tool SCons.</li><li>• Created and managed a suite of internal Shiny applications, specifically designed for testing pre-release components of RIPL's DOORS recommendation algorithm.</li></ul>	

## Publications

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- Estimating Value-added Returns to Labor Training Programs with Causal Machine Learning** with Mintaka Angell et al. OSF Preprints, 24 Sept. 2021.
- Delivering Unemployment Assistance in Times of Crisis: Scalable Cloud Solutions Can Keep Essential Government Programs Running and Supporting Those in Need** with Mintaka Angell et al. Digital Government: Research and Practice, vol. 2, no. 1, Jan. 2021, pp. 1–11.
- Are You Anonymous? Inferring Personal Information from Nonverbal Behavior Data Tracked in Immersive Virtual Reality** with Jose Guridi et al. Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing (CSCW '23 Companion).

## Working Papers

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- The Causal Effect of Parent Occupation on Child Occupation: A Multivalued Treatment with Positivity Constraints** with Jennie Brand and Ian Lundberg. OSF Preprints; SocArXiv Papers, 25 January 2024.

## Additional Information

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**Honors:** National Science Foundation Graduate Research Fellowship  
**Languages:** R, Python, Rust, Stata  
**Technologies:** SQL, Docker, Git, Quarto, AWS (EC2, S3), Shiny, Scikit-learn, Tidymodels, FastAPI, NextFlow, SCons  
**Research Interests:** Computational Social Science, Causal Inference, Public Policy